

Abstract

A complex product is composed of several parts, where each part may depend on the other. As a consequence of these inter-dependencies, the selection of one part might exclude other parts from being included in the finished product. A *consistent configuration* is a selection of parts where all inter-dependencies are satisfied.

- 5 A computer program for computer-assisted configuration helps an end-user to make choices that will lead to a consistent product. The preferred embodiment of the present invention, *Virtual Tabulation*, is a method for keeping track of inter-dependencies among a large number of parts, to allow for the construction of an efficient and exact configuration program. Such a program allows interactive configuration over networks (e.g., the Internet). Another aspect of the invention, called *Smart Search*, allows a set of inter-dependencies among
- 10 parts to be computed from a product database.